

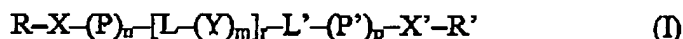
Application No.: 09/904,516

Attorney Docket No.: 012237-0281573

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in this application:

Claim 1. (Withdrawn) Water-soluble amphiphilic cationic associative polyurethanes of formula (I):



in which:

R and R', are identical or different, and represent a hydrophobic group or a hydrogen atom;
 X and X', are identical or different, and represent a group comprising an amine functional group which may or may not carry a hydrophobic group or an L» group;
 L, L' and L», are identical or different, and represent a group derived from diisocyanate;
 P and P', are identical or different, and represent a group comprising an amine functional group which may or may not carry a hydrophobic group;
 Y represents a hydrophilic group;
 r is an integer between 1 and 100,
 n, m and p have values, each independently of the others, between 0 and 1000;
 the molecule comprising at least one protonated or quaternized amine functional group and at least one hydrophobic group.

Claim 2. (Withdrawn) The polyurethane according to Claim 1, wherein the only hydrophobic groups are the R and R' groups.

Claim 3. (Withdrawn) The polyurethane according to Claim 1, wherein R and R' independently represent a hydrophobic group; X and X' are L», n and p have values between 1 and 1000; and L, L', L», P, P', Y and m are the same as Claim 1.

Claim 4. (Withdrawn) The polyurethane according to Claim 1, wherein R and R' independently represent a hydrophobic group; X and X' are L», n and p have the value 0; and L, L', L», Y and m are the same as Claim 1.

Claim 5. (Withdrawn) The polyurethane according to Claim 1, wherein R and R' independently

Application No.: 09/904,516

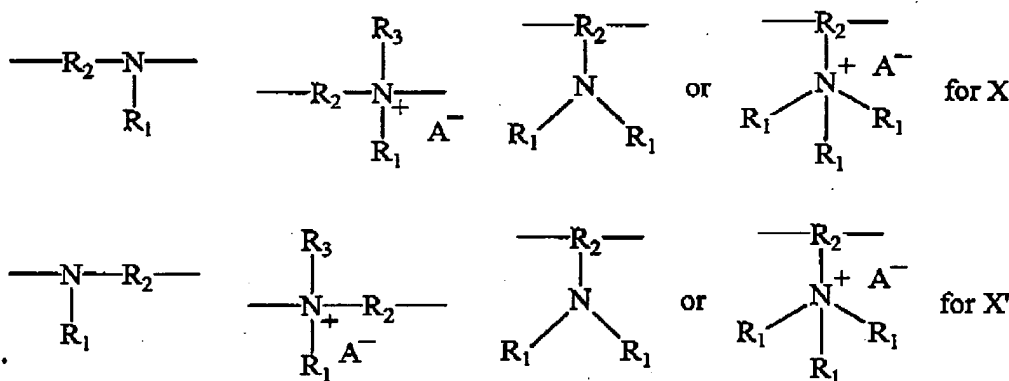
Attorney Docket No.: 012237-0281573

represent a hydrophobic group; X and X' comprise a quaternary amine; n and p have the value 0; and L, L', Y and m are the same as Claim 1.

Claim 6. (Withdrawn) The polyurethane according to Claim 1, which exhibits a number-average molecular mass between 400 and 500,000.

Claim 7. (Withdrawn) The polyurethane according to Claim 1, wherein R and R' represent a radical or a polymer with a saturated or unsaturated and linear or branched hydrocarbonaceous chain, in which chain one or more of the carbon atoms is optionally replaced by a heteroatom selected from the group consisting of S, N, O and P, or a radical comprising a silicone or perfluorinated chain.

Claim 8. (Withdrawn) The polyurethane according to Claim 1, wherein X and X' represent one of the formulae:



in which:

R₂ represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which optionally may comprise a saturated or unsaturated ring, or an arylene radical, wherein one or more carbon atoms optionally is replaced by a heteroatom selected from the group consisting of N, S, O or P;

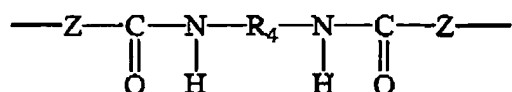
R₁ and R₃, are identical or different, are a linear or branched C₁-C₃₀ alkyl or alkenyl radical or an aryl radical, wherein at least one of the carbon atoms optionally can be replaced by a heteroatom selected from the group consisting of N, S, O and P;

A⁻ is a physiologically acceptable counterion.

Application No.: 09/904,516

Attorney Docket No.: 012237-0281573

Claim 9. (Withdrawn) The polyurethane according to Claim 1, wherein L, L', and L» are identical or different, represent the formula:

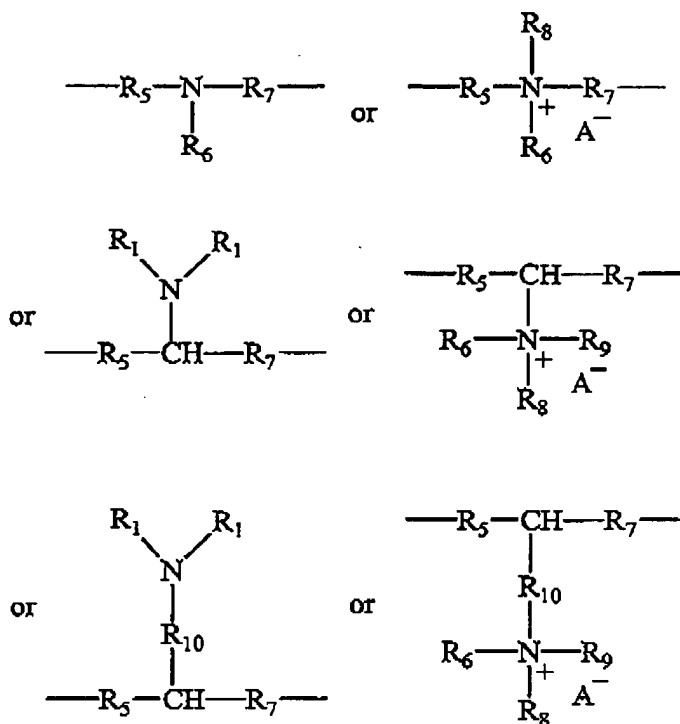


in which:

Z represents ---O--- , ---S--- , or ---NH--- ; and

R₄ represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which optionally may comprise a saturated or unsaturated ring, or an arylene radical, wherein one or more of the carbon atoms optionally is replaced by a heteroatom chosen from N, S, O and P.

Claim 10. (Withdrawn) The polyurethane according to Claim 1, wherein P and P' are identical or different, and are selected from the following formulae:



R₅ and R₇ are identical or different and represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which optionally may comprise a saturated or unsaturated ring, or an arylene radical, wherein one or more carbon atoms optionally is replaced by a heteroatom selected from the group consisting of N, S, O or P;

Application No.: 09/904,516

Attorney Docket No.: 012237-0281573

R_6 , R_8 and R_9 are identical or different, are a linear or branched C_1 - C_{30} alkyl or alkenyl radical or an aryl radical, wherein at least one of the carbon atoms optionally can be replaced by a heteroatom selected from the group consisting of N, S, O and P;

R_{10} represents a linear or branched alkylene group which is optionally unsaturated and which optionally comprises one or more heteroatoms selected from the group consisting of N, O, S and P, and

A^- is a physiologically acceptable counterion.

Claim 11. (Withdrawn) The polyurethane according to Claim 1, wherein Y represents a glycol selected from the group consisting of ethylene glycol, diethylene glycol and propylene glycol or a polymer selected from the group consisting of polyethers, sulphonated polyesters and sulphonated polyamides.

Claim 12. (Withdrawn) A method for using a polyurethane as defined in Claim 1 as a thickener or gelling agent comprising adding said polyurethane to a composition which is to be used for topical application as a cosmetic.

Claim 13. (Withdrawn) A cosmetic composition thickened or gellified with at least one water-soluble polyurethane according to Claim 1.

Claim 14. (Withdrawn) The polyurethane according to Claim 6, which has a number-average content mass ranging from 1,000 to 400,000.

Claim 15. (Withdrawn) The polyurethane according to Claim 7, which has a number-average molecular weight ranging from 1,000 to 300,000.

Claim 16. (Withdrawn) The polyurethane according to Claim 1, wherein r is an integer between 1 and 50.

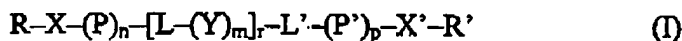
Claim 17. (Withdrawn) The polyurethane according to Claim 16, wherein r is an integer between 1 and 25.

Claim 18. (Previously presented) A cosmetic composition comprising water-dispersible amphiphilic cationic associative polyurethanes of formula (I):

Application No.: 09/904,516

Attorney Docket No.: 012237-0281573

in which:



R and R', are identical or different, and represent a hydrophobic group or a hydrogen atom;

X and X', are identical or different, and represent a group comprising an amine functional group which may or may not carry a hydrophobic group or an L'' group;

L, L' and L'', are identical or different, and represent a group derived from diisocyanate;

P and P', are identical or different, and represent a group comprising an amine functional group which may or may not carry a hydrophobic group;

Y represents a hydrophilic group;

r is an integer between 1 and 100,

n, m and p have values, each independently of the others, between 0 and 1000;

the molecule comprising at least one protonated or quaternised amine functional group and at least one hydrophobic group.

Claim 19. (Previously presented) The cosmetic composition according to Claim 18, wherein the only hydrophobic groups are the R and R' groups.

Claim 20. (Previously presented) The cosmetic composition according to Claim 18, wherein R and R' independently represent a hydrophobic group; X and X' are L''; n and p have values between 1 and 1000; and L, L', L'', P, P', Y and m are the same as Claim 18.

Claim 21. (Previously presented) The cosmetic composition according to Claim 18, wherein R and R' independently represent a hydrophobic group; X and X' are L'', n and p have the value 0; and L, L', L'', Y and m are the same as Claim 18.

Claim 22. (Previously presented) The cosmetic composition according to Claim 18, wherein R and R' independently represent a hydrophobic group; X and X' comprise a quaternary amine; n and p have the value 0; and L, L', Y and m are the same as Claim 18.

Claim 23. (Previously presented) The cosmetic composition according to Claim 18, which exhibits a number-average molecular mass between 400 and 500,000.

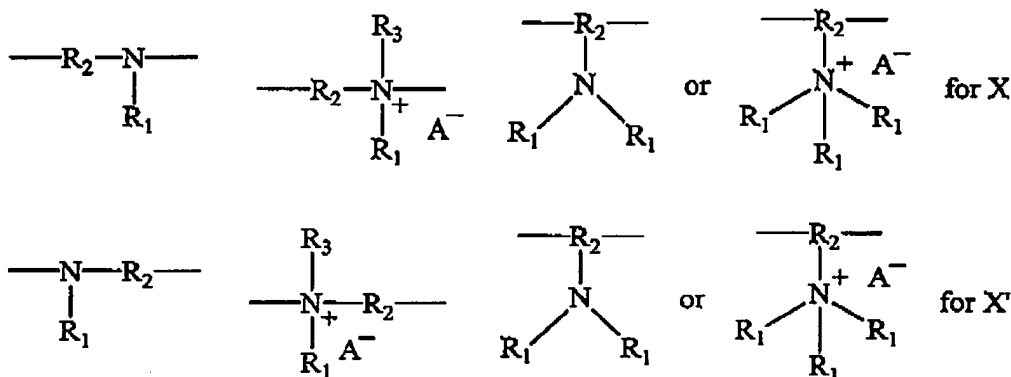
Claim 24. (Previously presented) The cosmetic composition according to Claim 18, wherein R

Application No.: 09/904,516

Attorney Docket No.: 012237-0281573

and R' represent a radical or a polymer with a saturated or unsaturated and linear or branched hydrocarbonaceous chain, in which chain one or more of the carbon atoms is optionally replaced by a heteroatom selected from the group consisting of S, N, O and P, or a radical comprising a silicone or perfluorinated chain.

Claim 25. (Previously presented) The cosmetic composition according to Claim 18, wherein X and X' represent one of the formulae:



in which:

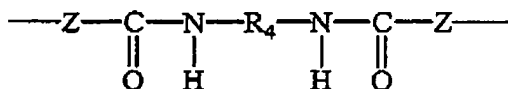
R₂ represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which optionally may comprise a saturated or unsaturated ring, or an arylene radical, wherein one or more carbon atoms optionally is replaced by a heteroatom selected from the group consisting of N, S, O or P;

R₁ and R₃, are identical or different, are a linear or branched C₁-C₃₀ alkyl or alkenyl radical or an aryl radical, wherein at least one of the carbon atoms optionally can be replaced by a heteroatom selected from the group consisting of N, S, O and P;

A⁻ is a physiologically acceptable counter ion.

Claim 26. (Previously presented) The cosmetic composition according to Claim 18, wherein L, L', and L'' are identical or different, and represent the formula:

in which:



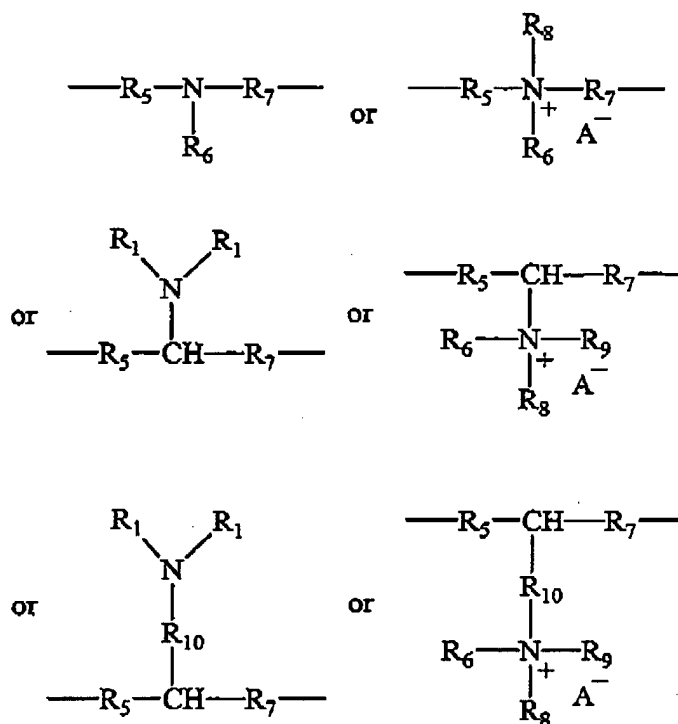
Z represents -O-, -S-, or -NH-; and

Application No.: 09/904,516

Attorney Docket No.: 012237-0281573

R₄ represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which optionally may comprise a saturated or unsaturated ring, or an arylene radical, wherein one or more of the carbon atoms optionally is replaced by a heteroatom chosen from N, S, O and P.

Claim 27. (Previously presented) The cosmetic composition according to Claim 18, wherein P and P' are identical or different, and are selected from the following formulae:



R₅ and R₇ are identical or different and represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which optionally may comprise a saturated or unsaturated ring, or an arylene radical, wherein one or more carbon atoms optionally is replaced by a heteroatom selected from the group consisting of N, S, O or P;

R₆, R₈ and R₉ are identical or different, are a linear or branched C₁-C₃₀ alkyl or alkenyl radical or an aryl radical, wherein at least one of the carbon atoms optionally can be replaced by a heteroatom selected from the group consisting of N, S, O and P;

R₁₀ represents a linear or branched alkylene group which is optionally unsaturated and which optionally comprises one or more heteroatoms selected from the group consisting of N, O, S and P, and

Application No.: 09/904,516
Attorney Docket No.: 012237-0281573

A^- is a physiologically acceptable counter ion.

Claim 28. (Previously presented) The cosmetic composition according to Claim 18, wherein Y represents a glycol selected from the group consisting of ethylene glycol, diethylene glycol and propylene glycol or a polymer selected from the group consisting of polyethers, sulphonated polyesters and sulphonated polyamides.

Claim 29. (Canceled)

Claim 30. (Previously presented) The cosmetic composition according to Claim 23, which has a number-average content mass ranging from 1,000 to 400,000.

Claim 31. (Previously presented) The cosmetic composition according to Claim 30, which has a number-average molecular weight ranging from 1,000 to 300,000.

Claim 32. (Previously presented) The cosmetic composition according to Claim 18, wherein r is an integer between 1 and 50.

Claim 33. (Previously presented) The cosmetic composition according to Claim 32, wherein r is an integer between 1 and 25.